



## QUALITY OF CARE AND OUTCOMES ASSESSMENT

### IDENTIFYING VALUE IN ACUTE MYOCARDIAL INFARCTION CARE: COMPARING HOSPITALS ON MEDICARE COSTS AND MORTALITY

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Sunday, April 03, 2011, 10:00 a.m.-11:15 a.m.

Session Title: Outcomes after Acute Myocardial Infarction

Abstract Category: 47. Appropriateness, Pay for Performance, Cost of Care

Session-Poster Board Number: 1032-157

Authors: *Oliver Wang, Changqin Wang, Susannah M. Bernheim, Elizabeth Drye, Harlan M. Krumholz, Yale-New Haven Health Center for Outcomes Research and Evaluation, New Haven, CT, Yale University, Robert Wood Johnson Clinical Scholars Program, New Haven, CT*

**Background:** Comparing hospital-level Medicare cost to patient outcomes may identify institutions providing higher value care. We compared risk-standardized Medicare cost to risk-standardized 30-day mortality rates for patients hospitalized with acute myocardial infarction (AMI).

**Methods:** Patients included over the 2006-08 period were Medicare fee-for-service, >65 years of age and had a primary ICD-9 code of AMI. Medicare cost were determined using inpatient payments adjusted to remove the effect of regional price differences. Cost and outcomes were aggregated at the hospital level, which included institutions with 25 or more AMI discharges. Both Medicare cost and 30-day mortality for hospitals were risk-standardized using a validated method based on hierarchical generalized linear models to account for clustering of patients and adjusted for differences in case mix.

**Results:** The study cohort included 559,400 discharges in 2,938 hospitals. Overall, there was a small but significant negative correlation ( $r = -0.036$ ,  $p < 0.0001$ ) between risk-standardized cost and 30-day risk-standardized mortality. The risk-standardized cost explains only 0.13% of the variation observed in 30-day risk-standardized mortality.

**Conclusion:** The lack of a strong association between the cost of care and patient outcomes suggest that some institutions successfully provide higher quality care without increased cost and warrants further investigation.

